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## EUROPEAN PATENT APPLICATION

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DE FR GB IT NL

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⑭ Unitary venous return reservoir with cardiotomy filter.

⑮ A novel unitary device (1) for the treatment and collection of blood from two different sources during a surgical procedure comprises a hollow housing (3) made of a rigid, preferably transparent, material, first and second blood inlets (15, 23) in the housing (3), a first blood treatment element (11) inside the housing (3) comprising a layer of porous defoaming material (87) and a layer of non-woven depth filter material (89), and a second blood treatment element (13) inside the housing (3) comprising a layer of porous defoaming material (99) and free of any depth filter material. The novel device also includes means for providing two blood flow paths therein, one through the first inlet (15), the first blood treatment element (11), a blood collection reservoir (25) defined within the device and a treated blood outlet (29) in the bottom wall (7) of the housing (3), and the other through the second inlet (23), the second blood treatment element (13), said blood collection reservoir (25) and said blood outlet (29). The

latter blood flow path bypasses at least the depth filter material layer (89) of the first blood treatment element (11). In typical use in an extracorporeal flow circuit, cardiotomy blood is introduced to the first inlet (15), venous return blood is introduced to the second inlet (23) and the common blood outlet (29) is connected to an extracorporeal blood pump. As a result, passage of the relatively clean venous return blood through a depth filter material is avoided.

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
D,A	<p><u>EP - A1 - 0 122 748</u> (SHILEY INC.)</p> <p>* Totality, especially fig. 3; page 5, line 28 - page 7, line 7; page 7, lines 23-34; page 8, line 15 - page 9, line 19 *</p> <p>---</p>	1,6	<p>A 61 M 1/36</p> <p>A 61 M 1/34</p>
A	<p><u>US - A - 3 993 461</u> (R.J. LEONARD et al.)</p> <p>* Fig. 3; column 4, line 29 - column 5, line 26 *</p> <p>---</p>	1,6	
A	<p><u>FR - A1 - 2 452 936</u> (G.C. PATRIN)</p> <p>* Fig. 1,2; page 3, line 8 - page 5, line 9 *</p> <p>---</p>	1,6	
A	<p><u>US - A - 4 208 193</u> (J.M. MUNSCH et al.)</p> <p>* Fig. 1; column 2, line 38 - column 3, line 8 *</p> <p>---</p>	1,6	<p>TECHNICAL FIELDS SEARCHED (Int. Cl.4)</p> <p>A 61 M 1/00</p>
A	<p><u>US - A - 3 507 395</u> (D.J. BENTLEY)</p> <p>* Fig. 1,2; column 2, line 4 - column 3, line 26 *</p> <p>---</p>	1,6	
A	<p><u>US - A - 4 253 967</u> (D.A. RAIBLE)</p> <p>* Fig. 2,4,6,7; column 2, line 21 - column 5, line 3 *</p> <p>----</p>	1,6	
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
VIENNA	08-03-1988	LUDWIG	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
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P : intermediate document	& : member of the same patent family, corresponding document		